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10/587,865

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Iwao Yamazaki

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01/27/2009

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EXAMINER

PORTER, JR, GARY A

ART UNIT

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3766

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|---------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/587,865 | Applicant(s) YAMAZAKI, IWA0 | |
| | Examiner GARY A. PORTER, JR | Art Unit 3766 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. On line 6 of claim 1, Applicant claims “a treatment current supplying means for supplying a pulsed current to a body part to which said conducting pad is attached on an electric power supply from said electric power source (emphasis added).” From this limitation, the Examiner cannot discern the claimed physical relationship between a treatment current supplying means, an electric power supply and said electric power source. For the purposes of interpretation, Examiner believes Applicant is stating that the treatment current supplying means is located on or in said electric power source and is powered by an electric power supply, all of which are located on said conducting pad (as shown in Fig. 6 of Applicant’s disclosure). The Examiner suggests revising the language of the claim to more clearly recite the relationship between a treatment current supplying means, an electric power supply and said electric power source.

4. Claims 2-14 stand rejected under 35 U.S.C. 112 second paragraph as being dependent on a previously rejected indefinite claim

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US Pub. 2003/0153958) in view of Ya Man LTD (JP 2000-060977).

7. Regarding claim 1, Yamazaki discloses an electrode for treatment (Abstract), comprising an electric power source, which is an inherent feature since the system can be turned on and off (Section [0058]); a conducting pad 5 for attaching a human body (Abstract); a treatment current supplying means for supplying a pulsed current to a body part to which said conducting pad is attached on the electric power supply from said electric power source (Section [0012]); and a portable controlling means 2 for controlling said treatment current supplying means on the basis of a control signal received by the conducting pad 5 (Section [0067]). Yamazaki does not disclose a receiving means for receiving an external control signal at radio transmission. However, Ya Man teaches an electrode treatment device that contains a portable control unit 1 that transmits control signals via a transmission antenna to a receiving antenna on the treatment apparatus in order to control the stimulation given by an electrode belt (Abstract). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made

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to modify the device in the Yamazaki reference to include electrode treatment device that contains a portable control unit 1 that transmits control signals via a transmission antenna to a receiving antenna on the treatment apparatus in order to control the stimulation given by an electrode belt, as taught and suggested by Ya Man, for the purpose of making the system more flexible by eliminating bulky wires.

8. In regards to claim 2, Yamazaki teaches that the current supplying means is configured so as to stop the supply of said pulsed current at a given period, i.e. defines the period of the treatment (Section [0058]).

9. With regards to claim 3, Yamazaki teaches that the conducting pad is comprised of a plurality of conducting pads, i.e. H1, H2, etc. (Sections [0032, 0054]).

10. Regarding claim 4, Yamazaki teaches a conducting pad connector (cable 59 and button recess 7) for electrically and mechanically connecting the plurality of pads, wherein the length of said conducting pad connector is changeable, i.e. any length of cable can be used in the connector (Section [0055]; Fig. 2).

11. In regards to claim 5, Yamazaki teaches that the conducting pad connector (cable 59 and button recess 7) is flexible, as seen by the bend in cable 59 (Fig. 2) and analogous cable 3 (Section [0055]; Fig. 1; Fig. 7).

12. With regards to claim 6, Yamazaki teaches an impedance measuring means 20 for measuring the impedance of said body part to which said conducting pad is attached by emitting a measuring current in said body part (Section [0064]).

13. Regarding claim 7, Yamazaki discloses that the impedance measurement obtained from the impedance measurement unit 20 is used to evaluate the body fat of a

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user and then prescribe a specific treatment based on the body fat reading (Section [0062-0068]; Fig. 4). Yamazaki does not disclose a transmitting means for transmitting the impedance measurement to a receiving means for controlling stimulation applied to the body based on an impedance measurement. However, Ya Man teaches an electrode treatment device that contains a portable control unit 1 that transmits control signals via a transmission antenna to a receiving antenna on the treatment apparatus in order to control the stimulation given by an electrode belt (Abstract). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in the Yamazaki reference to include electrode treatment device that contains a portable control unit 1 that transmits control signals via a transmission antenna to a receiving antenna on the treatment apparatus in order to control the stimulation given by an electrode belt, as taught and suggested by Ya Man, for the purpose of making the system more flexible by eliminating bulky wires.

14. In regards to claims 8 and 9, Yamazaki teaches that the frequency and therefore pulse width of stimulation is varied based on the treatment regimen chosen, which is determined by the body fat measurement derived from the impedance measurement (Section [0062-0073]).

15. With regards to claim 10, Yamazaki teaches a pad adhering means, i.e. a face fastener 54, that fastens the conducting pad 5 to the body (Section [0091]).

16. Regarding claim 11, Yamazaki teaches that the conducting pad is made of an adhesive sheet with electric conduction (Section [0092]).

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17. In regards to claim 12, Yamazaki teaches that the conducting pad 5 is comprised of a plurality of conducting pads, H1-H4 commensurate with different kinds of shapes of said body part (Fig. 1).

18. With regards to claim 13, Yamazaki teaches a clothing, i.e. a belt, with said plurality of conducting pads which are fixed so as to be contacted to said body part at treatment (Fig. 1).

19. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US Pub. 2003/0153958) in view of Ya Man LTD (JP 2000-060977), further in view of Granek et al. (US Patent 4,729,377). Yamazaki and Ya Man disclose all of the claimed invention except for a heart beat detecting means for detecting the number of heart beats through said conducting pad to be contacted to said body part. However, Granek teaches a garment apparatus for delivering and receiving electrical impulses that uses electrodes 24 can detect ECG signals. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in the Yamazaki and Ya Man combination to include a heart beat detecting means for detecting the number of heart beats through said conducting pad to be contacted to said body part, i.e. an ECG, as taught and suggested by Granek for the purpose of monitoring the function of the heart during therapy in order to ensure patient safety.

Response to Arguments

20. Applicant's arguments filed 12/3/2008 have been fully considered but they are not persuasive.

21. Applicant argues at page 12 under the heading "Rejection of claims 1-13 under 35 U.S.C. 103(a)" that Ya Man LTD (2000-060977) does not teach or suggest "[a]n electrode for treatment...comprising...a receiving means for receiving a control signal proper for said treatment electrode transmitted from said controller at radio transmission." The Examiner respectfully disagrees. The Examiner respectfully disagrees. Ya Man LTD explicitly states in the Abstract that control signals are transmitted from control box 1 via transmission antenna 12 to the pulsed power source 2 located on the garment attached to the body. The pulsed power source receives the control signal via reception antenna 12. The pulsed power source, which is located on the garment attached to the body, as seen in the Abstract picture of Ya Man LTD, in turn converts the control signal to stimulation pulses to be applied to the body (Abstract of Ya Man LTD). Furthermore, the Examiner notes that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

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22. Applicant argues at page 13 under the heading "Rejection of claims 1-13 under 35 U.S.C. 103(a)" that "the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the claimed invention and the prior art. Moreover, there is no motivation for one of ordinary skill in the art to modify the references to achieve the claimed combinations." The Examiner respectfully disagrees. As cited by the previous Office Action mailed 9/19/2008, Examiner has noted that the Abstract of Yamazaki et al. (US Pub. 2003/0153958) and the Abstract of Ya Man LTD (2000-060977) pertain to the scope of Applicant's invention, which is recited in claim 1 as "an electrode for treatment". The Examiner has also noted in the previous Office Action that Yamazaki discloses a body contacting stimulation system containing a portable controller 2 wherein control signals are sent from the controller 2 to conducting electrode belt 5 (Section [0067]; see also Fig. 1). Yamazaki therefore teaches transmitting signals from the control unit 2 to electrode belt 5, albeit the transmission occurs via physical cables no radio frequency transmission. However, as stated in the prior Office Action, Ya Man LTD teaches an analogous treatment system comprising a portable control unit 1 and a garment to be placed on the body containing electrodes. Instead of connecting physical cables to the stimulation device, Ya Man LTD has included wireless radio transmission. As stated in the rejection of claim 1 in the previous Office Action, altering the portable controller to transmit wirelessly rather than through physical cables involves only routine skill in the art.

23. Furthermore, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed

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invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, wireless technology was a generally known technology at the time the invention was created and it was further known to replace cumbersome wires and cables with wireless transmitters and receivers in order to make device more portable and also ease the setup process of numerous devices. The addition of a wireless transmitter and receiver to the system in the Yamazaki reference does not result in any unexpected results. Instead, the same communication link established via cable occurs wirelessly, the only difference being the wireless system has more portability and free range of motion in relation to the body applied stimulation device than that of the system bogged down by cables.

24. In view of the above arguments, the Examiner still holds the rejection of claim 14, Yamazaki in view of Ya Man LTD and Granek, to still be proper.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GARY A. PORTER, JR whose telephone number is (571)270-5419. The examiner can normally be reached on Monday - Thursday, 8AM - 5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571)272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. A. P./
Examiner, Art Unit 3766

/Carl H. Layno/
Supervisory Patent Examiner, Art
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